

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

December 27, 2000

Roger Kennett and Brian J. Sogorka Interstate Technology & Regulatory Cooperation Work Group 444 North Capitol St. Suite 305 Washington, D.C. 20001

Dear Mr. Kennett and Mr. Sogorka:

I am pleased to provide you a copy of an EPA guidance memorandum, which I recently signed, on the applicability of RCRA section 3020 to in-situ ground-water remediation. We recognize and appreciate the long-term interest of the Interstate Technology and Regulatory Cooperation Work Group in innovative ground-water cleanup technologies. As you know, we developed this guidance memorandum partially in response to your study, *Regulatory and Technical Guidance for In Situ Bioremediation of Chlorinated Solvents in Groundwater*, and your letter to me of September 9, 1999.

In your September letter, you asked three specific questions. The attached guidance answers your questions. For your convenience, I've summarized the answers below, but for more detail you should refer to the policy memorandum.

1. Question: Is injection of contaminated ground water back into the contaminant plume without substantially reducing the concentrations in the injected fluid covered by RCRA section 3020(b) exemption for cleanup sites?

Answer: EPA interprets section 3020(b)(2) to require that the treatment be intended to "substantially reduce" hazardous constituents in the ground water. But the "substantial reduction" may occur either before or after reinjection. The reduction may occur "in-situ" after reinjection of the ground water into the aquifer. As long as the reinjection meets these conditions (and the other conditions of section 3020(b)), it may occur without triggering the section 3020(a) prohibition on underground injection of hazardous wastes or the RCRA land disposal restrictions.

2. Question: If injection of contaminated ground water is covered by RCRA section 3020(b), does the exemption extend to state programs?

Answer: The guidance memorandum states that RCRA sections 3020(b)(1)(A) and 3020(b)(1)(B) limits the section 3020(b) exemption to "response actions" taken under CERCLA section 104 or 106 and to "corrective action" required under RCRA. The exemption applies to any CERCLA action under section 104 or 106, including actions where federal agencies other than EPA are the lead agency. Second, the exemption would apply to any actions taken at RCRA treatment, storage, or disposal facilities (TSDs) under RCRA "corrective action" authorities, including (but not limited to) sections 3004(u), 3004(v), and 3008(h). It would also apply to injections that occur as part of a remedy under an authorized state corrective action program.

3. Question: Is injection of amendments alone prohibited under RCRA?

Answer: As explained in the policy memorandum, RCRA subtitle C, including section 3020, does not prohibit the injection of amendments alone into ground water during in-situ treatment if the amendments are not hazardous waste.

If you have any questions or would like to discuss these issues in more detail please contact Robert Hall, Deputy Director, Permits and State Programs Division, at 703-308-8432.

Sincerely,

/S/

Elizabeth A. Cotsworth, Director Office of Solid Waste

cc: Tom Kennedy, Association of State and Territorial Solid Waste Management Officials

Attachment